

**City of Lowell**  
**Job Description**  
**Please Post: January 6, 2021**  
**Deadline: Open Until Filled**  
**Transportation Engineer**  
**Division of Planning & Development**

**Job Title:** Transportation Engineer (2700-65, 2846)  
**Department:** Division of Planning & Development  
**Reports To:** Assistant City Manager/Director of Planning & Development; Deputy Director, Division of Planning and Development  
**Union Status:** AFSCME Local 2532  
**Salary:** \$ 91,516.88 (min) to \$ 98,589.92 (max) annual; 35hrs/week  
**FLSA status:** Non-exempt

**SUMMARY**

Develops plans for surface transportation projects according to established engineering standards and state, federal or local construction policy by performing the following duties.

**ESSENTIAL DUTIES AND RESPONSIBILITIES** include the following. Other duties may be assigned.

Prepares plans, estimates, and specifications to design transportation improvements. Creates, designs, and manages the implementation of various neighborhood scale multi-modal improvement projects.

Manages the citywide pavement marking maintenance program. Conducts yearly inspections of pavement markings. Procures, schedules and supervises pavement marking contractors. Assists in the purchasing of pavement marking materials.

Reviews all private development projects with respect to traffic impacts and determines measures to mitigate adverse impacts of projects. Ensures consistency with the city's transportation policies and goals.

Develops and implements the transportation elements of the city's Comprehensive Master Plan.

Plans alterations and modifications of existing streets, highways, freeways, sidewalks, crosswalks and intersections to achieve the goals of the Master Plan and/or Neighborhood Plans on behalf of the Planning & Development Dept.

Prepares and presents public reports of transportation analysis statements and other transportation information.

Conducts investigations relating to traffic controls and public inquiries; supports the Department's customer service goals in relation to a timely and professional response to the needs of the community, elected officials and other city departments; provides research and recommendations to address public complaints and City Council motions regarding transportation issues. Drafts all ordinances for regulatory measures with input from the Lowell Police Department, Law Department and relevant planning studies.

Recommend priorities for neighborhood traffic calming projects, pedestrian improvements and intersection upgrades.

Oversees the traffic signal capital program, assists the traffic control installation process, assists with special event preparation, and manages the bike rack installation program.

Coordinates projects to update and maintain traffic signal timings. Conducts routine inspections and diagnoses basic traffic signal problems. Plans and designs traffic signal improvements and oversees the permitting process for signals and traffic signage in accordance with applicable local, state, and Federal regulations.

Provides quality control reviews for construction projects prior to bid advertisement.

Coordinates and manages private consultants in the study, design, and construction oversight of capital improvement projects. Manages projects through the public procurement process including bidding and construction.

Reviews and approves all traffic management plans for all utility and construction projects impacting public streets and sidewalks. Ensures compliance with MassDOT and MUTCD standards.

Studies vehicular and pedestrian traffic conditions. Conducts traffic studies including speed studies; traffic, pedestrian, and bicycle counts; turning movement counts; manual classification counts; accident studies, and other data collection efforts as required to support traffic engineering studies and roadway design projects.

Coordinates all relevant departmental activities with the Police Traffic Division.

Identifies and pursues all appropriate federal and state funds which support traffic improvements. Acts as liaison to regional transportation planning efforts and groups to represent the interests of the City, including the Northern Middlesex Council of Governments which provides state and federal funding of projects through the Transportation Improvement Program (TIP).

Works with the University of Massachusetts Lowell to coordinate and review transportation improvement projects affecting campus and city facilities.

Coordinates planning, design and construction of various transportation projects with local, state, and federal agencies.

Completes special projects as designated by the DPD Director.

## **QUALIFICATIONS**

To perform this job successfully, an individual must be able to perform each essential duty satisfactorily. The requirements listed below are representative of the knowledge, skill, and/or ability required. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

## **EDUCATION and/or EXPERIENCE**

Bachelor of Science degree (B.S.) from four year college or university in Civil Engineering with a transportation concentration. Familiarity with established standards for transportation analysis and design. Familiar with procedures related to traffic impact studies and roadway safety audits. Ability to communicate engineering concepts to the general public. Must possess excellent project management, organizational, communication, presentation, computer, writing and analytical skills. Skills in the use of computer programs including Synchro/SimTraffic, HCS, Petra, GIS required. Good negotiation skills and an ability to achieve consensus among diverse groups and the ability to explain complex technical information to lay audiences also required. Must have demonstrated experience in managing consultants who produce designs and construction documents for transportation infrastructure. Ability to review plans, work with a wide variety of people, coordinate projects and understand cost estimates required. Demonstrated ability to function as a team member as well as a project manager. Mastery of the Manual on Uniform Traffic Control Devices (MUTCD) and the Massachusetts Amendments to the MUTCD. Knowledge and experience with complete street design guidelines. Knowledge of the State Procurement laws and regulations.. At least fifteen years of related experience preferred.

## **LANGUAGE SKILLS**

Ability to read, analyze, and interpret general business periodicals, professional journals, technical procedures, or governmental regulations. Ability to write reports, business correspondence, and procedure manuals. Ability to effectively present information and respond to questions from groups of managers, clients, customers, and the general public. Ability to establish and maintain effective and harmonious working relationships with City officials and departments, state agencies and the general public; ability to deal with employees tactfully and effectively and maintain positive public relations.

## **MATHEMATICAL SKILLS**

Ability to work with mathematical concepts such as probability and statistical inference, and fundamentals of plane and solid geometry and trigonometry. Ability to apply concepts such as fractions, percentages, ratios, and proportions to practical situations.

## **REASONING ABILITY**

Ability to solve practical problems and deal with a variety of concrete variables in situations where only limited standardization exists. Ability to interpret a variety of instructions furnished in written, oral, diagram, or schedule form.

## **CERTIFICATES, LICENSES, REGISTRATIONS**

Valid driver's license required. Registered Professional Engineer in the Commonwealth of

Massachusetts.

### **PHYSICAL DEMANDS**

The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

Work involves frequent evening meetings, requiring travel to and through the City to project locations, driving, walking, biking. While performing the duties of this job, the employee is frequently required to talk or hear. The employee is occasionally required to stand; walk; sit; use hands to finger, handle, or feel; and reach with hands and arms. The employee must occasionally lift and/or move up to 25 pounds. Specific vision abilities required by this job include close vision, distance vision, color vision, peripheral vision, depth perception, and ability to adjust focus.

### **WORK ENVIRONMENT**

The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

While performing the duties of this job, the employee is occasionally exposed to fumes or airborne particles and outside weather conditions. Work involved is outdoors including construction sites and congested city roadways in all weather conditions. The noise level in the work environment is usually moderate.

The City of Lowell is a smoke and drug free employer and requires physical with drug screen, and CORI post offer.

***Qualified individuals should send cover letter with resume and/or application to Mary Callery, HR Director, Human Relations Office, Rm 19 - City Hall, 375 Merrimack St. Lowell, MA 01852 by Deadline ~Open Until Filled***

***Applicants may also send resume and/or application by fax to 978-446-7102 or email to [cityjobs@lowellma.gov](mailto:cityjobs@lowellma.gov)***

***EOE/AA/504 Employer***